

June 25, 1991

To: Wayne Hedberg, Permit Lead/Supervisor

From: Holland Shepherd, Senior Reclamation Specialist *HS*

Re: Soil/Reveg. Review of Goldstrike Mine, April 23, 1991, Revised Notice of Intention Response, Tenneco Minerals, M/053/005, Washington County, Utah

I've reviewed Tenneco's April 23, 1991 response to our January 2, 1991 review letter. I am satisfied with their response to our commitments addressing soils, reveg. and wildlife questions, except for the following:

1. R613-004-106(5) - Topsoil Salvage

I am still concerned about the topsoil mass balance question. Tenneco indicates in their response, that there will be 193,000 cubic yards of topsoil made available for reclamation, plus another 10,000 cubic yards of overburden fines. The total will provide 203,000 cubic yards of topsoiling material.

Page 51A of the revised plan, breaks the various topsoil depths down for specific areas of the site, but does not provide acreages. The acreage for each separate area must be given to provide a basis for the calculations.

I still come up short with my estimates for the required amount of topsoil. Based on 250 - 30 (area under variance) = 220 acres, and an average topsoil depth of 8.5 inches, I come up with a required amount of topsoil of 251,411 cubic yards. This indicates of deficit of 48,411 cubic yards of topsoil.

Again, as we asked in the initial review, what will Tenneco do if there is a deficit? The operator must incorporate into the MRP a plan for dealing with a topsoil deficit. One option may be to salvage more overburden material that might function as a topsoil substitute.



2. R613-004-009 - Impact Assessement

Something which was not addressed in the operators initial revision, nor or first review, is the question of impacts of the cyanide processing facilities to wildlife. The operator needs to discuss this under Chapter 3, Existing Operation, of the MRP. Methods to be employed to haze and prevent access of wildlife to the cyanide containing facilities should be discussed. For example the use of propane canons around ponds and the use of ditch covers should be discussed in the plan. Also the Division has asked that Tenneco record all animal mortalities associated with the cyanide containing facilities. The procedure, which is presently employed to evaluate these mortalities must be included in the MRP.

3. R613-004-111(6) Reclamation Practices - Slopes

On page 5 of the response letter, Tenneco indicates that it is not possible to commit to regrading neutralized leach material to 3:1 slopes until BWPC has passed judgement on the appropriateness of pushing the material off the liner. I recommend that the Division formalize an opinion on this and submit it to BWPC. And, I recommend that the opinion state that the Division is in favor of pushing the material off the liner to achieve better reclamation, hence stability and productivity of the area. We would want to qualify this statement with the condition that the leached material is properly neutralized.

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